

## Midterm Lab Task 2.

### Using Loops and Selection statements

#### Problem 1.

Create a countdown timer, where the user is prompted to enter time in seconds and will countdown to zero (set timer delay to 1) using `time.sleep(time_lapse)`. The program should prompt the user to test the timer if the answer is 'y' it will ask the user to enter time in second. If the answer is 'n' it will terminate the timer. Your response to y or n should be case insensitive.

Answer:

```
1  import time
2  ans = input("Start the timer? Y/N ")
3  while ans == 'Y':
4      print("big clock")
5      clock = int(input("enter seconds "))
6      for t in range(clock, 0, -1):
7          second = t % 60
8          minute = t % 3600 // 60
9          hour = t // 3600
10         print(f"{hour:02}:{minute:02}:{second:02}")
11         time.sleep(1)
12     print("time!")
13     ans = input("gusto mo pa? Y/N\n")
14     if ans == 'N':
15         print("ok we're done")
```

Sample Output:

Start the timer[y|n]:? y

```
Start the timer? Y/N Y
big clock
enter seconds 10
00:00:10
00:00:09
00:00:08
00:00:07
00:00:06
00:00:05
00:00:04
00:00:03
00:00:02
00:00:01
time!
```

Try again?[y|n]: y

```
Start the timer? Y/N Y
big clock
enter seconds 1
00:00:01
time!
gusto mo pa? Y/N
Y
big clock
enter seconds 3
00:00:03
00:00:02
00:00:01
time!
gusto mo pa? Y/N
```

Try again?[y|n]: n

```
big clock
enter seconds 3
00:00:03
00:00:02
00:00:01
time!
gusto mo pa? Y/N
N
ok we're done
```

Bye!!! Thanks for using the program

Problem 2.

```
1 row = int(input("row : "))
2 collumn = int(input("collumn : "))
3
4 for i in range(1,row+1):
5     for j in range(1,collumn+1):
6         product = i*j
7         print(f"{product}\t", end = ' ')
8     print()
9     print()
```

```
row : 5  
column : 5  
1   2   3   4   5  
  
2   4   6   8   10  
  
3   6   9   12  15  
  
4   8   12  16  20  
  
5   10  15  20  25
```

Sample Output 2.

```
row : 3  
column : 3  
1   2   3  
  
2   4   6  
  
3   6   9
```